

## SCE1806-0105 DATA SHEET

# Low Loss Test N Male to SMA Male Cable LL335i Coax and RoHS

The SCE1806-0105 high performance test cable's 0.3 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The reduced 0.49 inch diameter SMA body allows for attachment to closely spaced connection points found on multiport components and interface panels. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All SCE1806-0105 cable assemblies are 100% continuity and RF tested to published specifications. Custom lengths are built to order and shipped same day.

## **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.0	02]	pF/ft [pF/m]

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.06	0.08	0.12	0.18	0.26	dB/ft
	[0.2]	[0.26]	[0.39]	[0.59]	[0.85]	[dB/m]
Insertion Loss (Typ.)	0.05	0.07	0.1	0.15	0.22	dB/ft
	[0.16]	[0.23]	[0.33]	[0.49]	[0.72]	[dB/m]
Power Handling (Max.)	1,800	1,200	900	650	400	W

#### **Electrical Specification Notes:**

Power handling values are calculated based on Cable properties. Power handling will vary based on the actual VSWR of the cable assembly. Insertion Loss does not include the loss of the connectors, insertion loss is estimated as .1dB per connector.

#### **Mechanical Specifications**

## **Cable Assembly**

Diameter 0.75 in [19.05 mm]

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 LL335i 50 Ohms Solid Copper, Silver

PTFE

Silver Plated Copper Tape



## **Configuration:**

- N Male
- SMA Male
- LL335i

#### **Features:**

- SMA Body diameter of 0.49 inches
- 83% Velocity of Propagation
- Shielding effectiveness > 95 B
- Maximum VSWR is < 1.35:1 to 18 GHz
- Minimum Bend Radius of 1.5 inches
- Operating Temperature range of -55 to +125 °C
- ROHS Compliant
- Same day shipment of custom lengths
- 100% Continuity and RF tested

## **Applications:**

- General Purpose
- Test & Measurement
- Laboratory Use

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013

Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter Aluminum Polyester Silver Plated Copper Wire FEP, Green

0.3 in [7.62 mm]

Repeated Minimum Bend Radius

1.5 in [38.1 mm]

#### **Connectors**

Description		Connector 1		Connector 2			
Туре		N Male		SMA Male			
Specification				MIL-STD-348			
Impedance		50 Ohms		50 Ohms			
Contact Material & Plating		Beryllium Copper, G	old	Beryllium Copper, Gold			
Contact Plating Spec.		ASTM-B488 50μ In.		ASTM-B488 50μ In.			
Dielectric Type		PTFE		PTFE			
Outer Cond Material & Plating		Passivated Stainless Steel		Passivated Stainless Steel			
Outer Cond Plating Spec.	Outer Cond Plating Spec.			SAE-AMS-2700			
Body Material & Plating		Passivated Stainless Steel		Passivated Stainless Steel			
Body Plating Spec.		SAE-AMS-2700		SAE-AMS-2700			
Coupling Nut Material & Plating		Passivated Stainless Steel		Passivated Stainless Steel			
Coupling Nut Plating Spec.		SAE-AMS-2700		SAE-AMS-2700			
Hex Size		3/4 Inch		5/16 Inch			
Torque		14 in-lbs [1.58 Nm]		8 in-lbs [0.9 Nm]			

#### Mechanical Specification Notes:

## **Environmental Specifications**

**Temperature** 

Operating Range

-55 to +125 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

• Values at 25°C, sea level.

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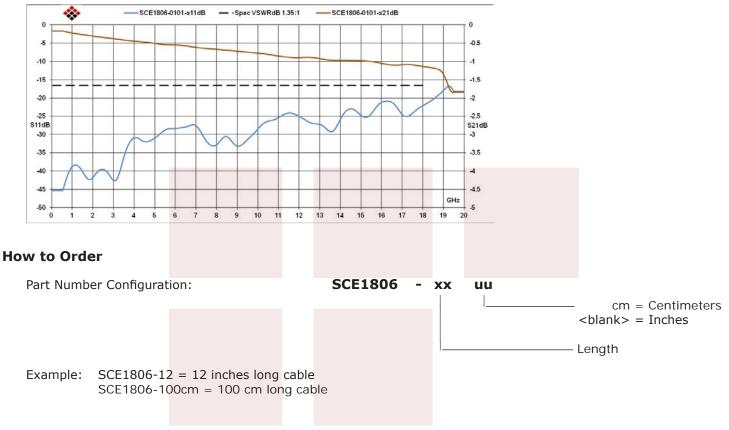
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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





### **Typical Performance Data**



Low Loss Test N Male to SMA Male Cable LL335i Coax and RoHS from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

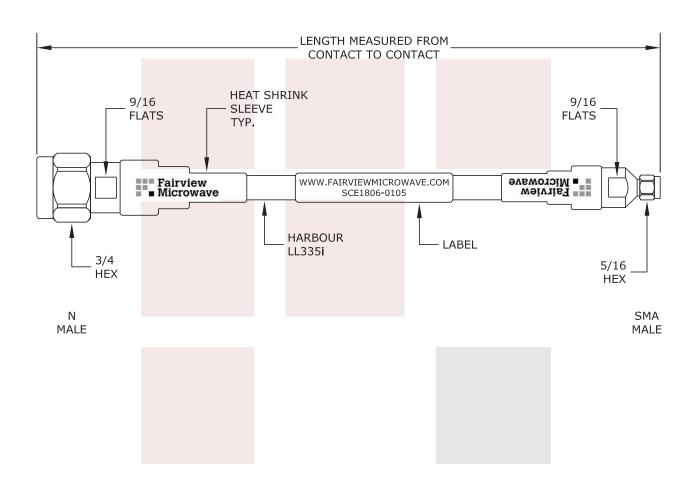
Click the following link to obtain additional part information: Low Loss Test N Male to SMA Male Cable LL335i Coax and RoHS SCE1806-0105

URL: https://www.fairviewmicrowave.com/low-loss-test-n-male-sma-male-cable-II335i-coax-sce1806-0105-p.aspx

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# NOTE: LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" AWAY FROM CONNECTOR.

FAIRVIEW MICROWAVE INC.  ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME 3. DIMENSIONS ARE IN INCHES [mm].				NY TIME.		
Low Loss Test N Male to SMA Male Cable LL335i Coax	DWG NO SCE1806-0105				CAGE CODE 3FKR5		
and RoHS	CAD FILE 121616	SHEET	SCAL	E N/A	SIZE A	2233	